

REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1, 3, 6, 7 and 9 have been amended and claims 2 and 8 have been cancelled without prejudice or disclaimer. Since claims 1 and 7 now include subject matter of cancelled claims 2 and 8, respectively, no new matter is being presented. Therefore, claims 1-11 are pending and reconsideration of the outstanding rejections is respectfully requested.

REJECTION UNDER 35 U.S.C. §103

In the Office Action, at page 2, claims 1-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP '440 (Japanese 2001-120440) in view of Potts (U.S. Patent No. 1,294,159). The rejection is traversed and reconsideration is requested.

Regarding the rejections of claims 1 and 7, briefly, claim 1 recites a grill unit, comprising a plurality of grill pipes, and water tanks respectively connected to ends of the grill pipes to supply water into the grill pipes, wherein a height of a cross-section of each of the grill pipes is greater than a width thereof and the height of the cross-section of each of the grill pipes is about 1.2 to about 2.0 times the width thereof. Similarly, claim 7 recites a cooking apparatus, comprising a cabinet having at least one heater, and a grill unit mounted on a top surface of the cabinet to support food, the grill unit comprising a plurality of grill pipes, and water tanks respectively connected to ends of the grill pipes to supply water into the grill pipes, wherein a height of a cross-section of each of the grill pipes is greater than a width thereof to circulate the water in the grill pipes and the height of the cross-section of each of the grill pipes is about 1.2 to about 2.0 times the width thereof.

JP '440 discloses a portable cooker used for grilling meat or fish or for warming a pot. The portable cooker of JP '440 includes a water tank 2, a gas heater main body 3 with gas burners 4, and what appear to be hollow grill pipes extending in a downward arc from a first compartment to a second compartment. Potts, on the other hand, discloses a broiler having oval shaped tubes 27 that extend from combustion chamber 21 to the flue chamber 30. In Potts, hot gases from the combustion chamber 21 flow through the tubes 27 to heat food placed on the tubes.

According to the Office Action, it would have been obvious to “modify the cross section of the JP ‘440 pipes to be oval.” Applicants respectively disagree with this conclusion and note that obviousness can only be established by modifying the teachings of the prior art where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves. Applicants further assert that there is indeed no teaching, suggestion, or motivation found either explicitly or implicitly in either Potts or JP ‘440 to make the suggested modification of the JP ‘440 grill pipes.

With regard to the statement in the Office Action that the combination provides “a suitable pipe cross section to, for example, limit the surface area each pipe contacts the food item supported thereon,” applicants respectfully assert that this apparent motivation is not found either explicitly or implicitly in the references themselves, but rather, is due to the deductive effort of the Examiner having the benefit of hindsight. Further, since this motivation clearly does not fall within the parameters of a proper motivation to modify the references, applicants respectfully assert that a desire to provide “a suitable pipe cross section to, for example, limit the surface area each pipe contacts the food item supported thereon” does not form the basis of a proper obviousness rejection.

Moreover, applicants note that even if there were a motivation to modify the grill pipes in the JP ‘440 reference, the shape of the tubes 27, in Potts, would not provide a design inspiration. That is, the Potts tubes 27 extend in straight lines from the combustion chamber 21 to the flue 30 while the JP ‘440 grill pipes have an arc shape similar to the depression of the grill pipes in the present application. Thus, forming the JP ‘440 grill pipes such that they have oval shaped cross-sections is significantly more complicated than would be the case if the grill pipes extended in straight lines, as in Potts.

Furthermore, in consideration of the newly incorporated subject matter of claims 1 and 7, applicants note that, according to the Office Action, in the section in which the rejection of the subject matter noted above was discussed, “the relative height and width dimensions of the tubes would necessarily depend on numerous design parameters . . . to [vary] the width of the JP ‘440 pipes according to the values set forth in applicant’s claims can be viewed as nothing more than merely a matter of choice.” Applicants respectfully disagree with this position.

For support, applicants refer to the fact that the specification clearly explains the reasoning behind designing the grill pipes to have shapes in accordance with former claims 2

and 8. As discussed in the specification, the width of the grill pipes is sufficiently narrow "so that heat may be easily transferred to food," and so that "heat loss due to interception of the heat by the grill pipes 21 is minimized." Further, the specification states that "as the width d2 of the grill pipes 21 is decreased, the height d1 of each of the grill pipes 21 is increased to allow a suitable amount of water to fill the grill pipes 21," so as to smoothly circulate water therethrough.

In other words, applicants assert that the shape of the grill pipes is not merely a design choice, but rather, a result of an understanding of the benefits of a particular shape in accordance with the claim language. Additionally, the above citations illustrate that the claimed shape provides the unexpected results, i.e. heat transfer between the grill pipes 21, the minimization of heat loss due to interception, and smooth circulation of water in the grill pipes 21, the Office Action alludes to on page 3.

Therefore, applicants respectfully assert that claims 1 and 7 are patentably distinguished over any combination of the references to Potts and JP '440. Thus, claims 1 and 7 are believed to be allowable.

Regarding the rejection of claims 3-6 and 9, applicants note that these claims depend from claims 1 and 7, respectively, and therefore, are also allowable for at least the reasons as set forth above.

In the Office Action, at page 3, claims 10 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP '440 (Japanese 2001-120440) in view of Potts (U.S. Patent No. 1,294,159) as applied to claim 7 above, and further in view of Siegel et al. (U.S. Patent No. D479,435). However, since Siegel does not provide a motivation to combine Potts and JP '440, the reference to Siegel fails to cure the deficiencies of the suggested modification. Therefore, the rejections of claims 10 and 11 are believed to be overcome, and claims 10 and 11 are believed to be allowable.

CONCLUSION

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.


If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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